

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

MAY 1 9 2011

REPLY TO THE ATTENTION OF:

Mary Ann Dolehanty Supervisor Air Quality Division Michigan Department of Environmental Quality 525 West Allegan Street P.O. Box 30473 Lansing, Michigan 48909-7973

Dear Ms. Dolehanty:

On April 13, 2011, the U.S. Environmental Protection Agency received notification of the Michigan Department of Environmental Quality's (MDEQ) intent to issue a Prevention of Significant Deterioration (PSD) construction permit for Wolverine Power Supply Cooperative, Inc. (permit number 317-07) to install a 600 megawatt (MW) coal and biomass fuel fired steam electric power plant in Rogers City, Michigan. The power plant is to be comprised of two 300 MW circulating fluidized bed (CFB) boilers. We appreciate the effort that MDEQ has put forth in developing this proposed permit record considering greenhouse gases (GHG) are newly regulated pollutants. The proposed permit sets a carbon dioxide equivalent (CO<sub>2</sub>e) GHG best available control technology (BACT) emission limit for each CFB boiler as 2.1 pounds of CO2e per kilowatt-hour gross output, as well as a 6,024,107 tons CO2e per year limit on a 12-month rolling average for each of the two CFB boilers.

We have completed our review of the draft permit and have the following comments. We provide these comments to help ensure that the project meets all federal requirements, that the permit provides all necessary information so that it is readily accessible to the public, and that the record for the permit provides adequate support for the permit decision.

- On page 28 of 58, FCGFB Section 1, the footnote numbered 1 associated with the emission limit for CO<sub>2</sub>e of 2.1 lb/kW-hr states, "[e]missions shall be calculated based on CO<sub>2</sub> CEMS data and fuel factors for non-CO<sub>2</sub> GHGs." To improve the supporting record for the permit, the EPA recommends MDEO either:
  - o provide the specific fuel factors in the permit;
  - o provide supporting documentation regarding which fuel factors that will be used to calculate the non-CO<sub>2</sub> GHG emissions; or
  - o refer to where the fuel factors are located (e.g., EPA Greenhouse Gas Reporting Rule).

- On page 33 of 58, Monitoring/Recordkeeping number 17(d) requires the source to maintain records of "[f]uel usages and heating values (Btu's/lb) of all fuels combusted in the FCG." To assist the source in assuring compliance with the 5% annual biomass usage limit (Material Limit 2, page 28 of 58), the EPA recommends that the permit specify that these records be maintained on an annual basis.
- We note that a number of permit conditions require reporting of excess emissions during periods of start-up, shutdown, and malfunction. However, it is unclear whether emissions that result from start-up, shutdown, and malfunctions are considered to be in compliance with BACT emission limits. Please clarify how the source will calculate compliance with BACT emission limits during periods of startup, shutdown, or malfunction. Alternatively, where MDEQ has made an on-record determination that compliance with the BACT emission limitations is infeasible during startup, shutdown and malfunction, you may establish secondary BACT limits or work practices for those specific periods. The EPA recommends that such secondary limits or work practices be justified as BACT and that MDEQ ensure that all PSD requirements, including compliance with National Ambient Air Quality Standards and PSD increments, are met. \(^1\)
- Since your previous permitting action on the proposed Wolverine facility, please be aware that the EPA recently proposed the National Emissions Standards for Hazardous Air Pollutants from Coal-and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating (see 76 FR 24976; May 3, 2011). Please ensure that any applicable requirements are reflected in a permit.

Again, we appreciate the opportunity to provide comments on this draft permit. Please feel free to contact me or have your staff contact Constantine Blathras, of my staff, at (312) 886-0671.

Sincerely,

Pamela Blakley

Chief

Air Permits Section

<sup>&</sup>lt;sup>1</sup> See <u>In re Prairie State Generating Company</u>, 13 E.A.D. 1, 85-91(EAB 2006); <u>In re Indeck-Niles Energy Center</u>, 13 E.A.D 126, 170-181 (EAB 2004); <u>In re Rockgen Energy Center</u>, 8 E.A.D. 536, 551-555 (EAB 1999).